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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,265	08/31/2001	Timothy A. Springer	CBN-002CP	1985
28120	7590	09/22/2005	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			HADDAD, MAHER M	
			ART UNIT	PAPER NUMBER
			1644	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/945,265

Applicant(s)

SPRINGER ET AL.

Examiner

Maher M. Haddad

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30,77,80,83,84,87,88,105,106,114,115,128 and 132-134 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30,83 and 132 is/are rejected.
- 7) ☒ Claim(s) 77, 80, 84, 87-88, 105-106, 114-115, 128 and 133-134 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## RESPONSE TO APPLICANT'S AMENDMENT

1. Applicant's amendment, filed 7/11/05, is acknowledged.
2. Claims 30, 77, 80, 83-84, 87-88, 105-106, 114-115, 128 and 132-134 are pending and under examination.
3. The specification is objected to for the following discrepancies: the specification on page 28 discloses that the  $\alpha$ L K287C/K294C mutant is a modified  $\alpha$ L polypeptide, wherein there is a change in the amino acid sequence of  $\alpha$ L (SEQ ID NO:2) such that amino acid residues 287 and 294 are substituted with cysteine residues. The corresponding wild wild-type nucleotide sequence, SEQ ID NO:1, is modified at nucleotide residues 1022-1024 and 1143-1145, respectively. However, there is no corresponding amino acids at positions 284, 287, 289, 294, 301 of SEQ ID NO: 2. The amino acid at positions positions 284, 287, 289, 294, 301 of SEQ ID NO: 2 are I (Ile), G (Gly), H (His), E (Glu) and K (lys), respectively. Further table 9, discloses several mutation in the  $\alpha$ L that do not correspond to the amino acid number in SEQ ID NO:2. Corrections/clarifications are required.

Applicant is required to check all the disclosed amino/nucleic acid mutation positions to make sure they are correspondent with the referenced SEQ ID NO.

4. Claim 30 is objected to because it is missing a period at the end of the claim.
5. Claims 105-106 are objected to because they have two periods at the end of the claims.
6. Claims 77, 80, 84, 87, 88, 105, 106, 114, 115, 128, 132-134 are objected to due to the discrepancy between the paper copy of the Sequence Listing and the recited amino acid position of each mutations. No correspondent amino acids to the claimed amino acid substitutions are found in the SEQ ID NOs. Correction/clarification is required.
7. In view of the amendment filed on 7/11/05, only the following rejections are remained.
8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --  
*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*
9. Claim 83 stands rejected under 35 U.S.C. 102(b) as being anticipated by Huang *et al* (Proc. Natl. Acad. Sci. 94:3162-3167, 1997) (of record), as is evidenced by Lu *et al* (Proc Natl Acad Sci 98:2393-2398, 2002) (of record) and the specification on page 76, lines 7-8 and page 77, Table 6 for the same reasons set forth in the previous Office Action mailed 4/7/05.

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Applicant's arguments, filed 7/11/05, have been fully considered, but have not been found convincing.

Applicant argues that there is no there is no support for the proposition that the antibodies of Lu et al "would inherently inhibit the interaction of LFA-1 integrin and ICAM-1, ICAM-2 or ICAM-3".

However, a chemical composition and its properties are inseparable, i.e., antibodies that are the same have the same properties. Therefore, the ability to inhibit the interaction of LFA-1 integrin ICAM-1, ICAM-2 or ICAM-3 is an inherent property of the referenced antibodies taught by Lu et al.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 30 and 132 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al (Proc. Natl. Acad. Sci. 94:3162-3167, 1997), as is evidenced by Lu et al (Proc. Natl. Acad. Sci. 98:2393-2398, 2002) and the specification on page 76, lines 7-8 and page 77, Table 6, in view of U.S. Patent No. 5,843,712 (of record) for the same reasons set forth in the previous Office Action mailed 4/7/05.

Applicant's arguments, filed 7/11/05, have been fully considered, but have not been found convincing.

Applicant has not specifically address the rejection of claims 30 and 132. Therefore, the Examiner's position is the same as in the previous Office Action mailed 4/7/05.

12. No Claim is allowed.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maher Haddad, Ph.D.  
Patent Examiner  
September 16, 2005

  
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